

SEP 01 2016

Mr. Chris Hase
Response and Remediation Unit
Kansas Department of Health and Environment
1000 SW Jackson, Suite 410
Topeka, Kansas 66612-1367

Re: EPA Response to Comments on the Final Feasibility Study, Cherokee County Operable Unit 8 Railroads Site, Cherokee County, Kansas and Draft Proposed Plan, Record of Decision, Cherokee County Site, Operable Unit 08 – Railroads, Cherokee County, Kansas

Dear Mr. Hase:

The U.S. Environmental Protection Agency has received the referenced document dated August 25, 2016. Responses to the comments are presented below.

1. (KDHE Comment) KDHE received the draft proposed plan (PP) before the final feasibility study (FS). KDHE received the final FS on August 1, 2016, without opportunity to review and comment on a revised version. Substantive changes to the proposed cleanup levels occurred between the initial draft FS KDHE reviewed and commented to EPA on June 20, 2016, and the draft PP received by KDHE on July 16, 2016.

EPA Response: To facilitate review of documents planned for signature, documents underwent concurrent review in some circumstances. The FS report received by KDHE on August 1, 2016, was titled as Final Draft and included red-line edits to facilitate KDHE review prior to finalization. The FS report was not finalized until August 12, 2016.

2. (KDHE Comment) KDHE's draft FS comments were based on understanding cleanup levels proposed in this remedial action are the PRG's used in all phases in operable units (OU) 3, 4, and 6. PP cleanup levels are based on the ecological risk (eco-risk) numbers, though both documents seemingly contain contradictory document references to both sets of cleanup levels. For example the PP's *Ecological Risk* section states the eco-risk numbers as cleanup levels are protective of the terrestrial site systems; then, the first paragraph of *Alternative 3 – Source Removal with Consolidation...* states that all ballast and contaminated soil with concentrations exceeding the PRGs will be excavated, backfilled, and graded. Alternatives 1 and 2 have similar discrepancies.

EPA Response: The EPA utilized rail-line specific cleanup levels developed in the Streamlined Ecological Risk Assessment for OU 08 – Railroads as proposed cleanup levels in the Final Draft and Final FS and Final PP. The terms cleanup levels and PRGs were being used interchangeably in the Draft PP. The use of the term "PRG" was removed in the Final PP for OU 08 to avoid confusion with the OU 03/04/06 PRGs.

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3. (KDHE Comment) *Section VIII. Preferred Alternative* states that railroad ballast visibly identified as chat will be removed and underlying soil and material removed until the eco-risk cleanup levels, based on XRF screening, are achieved. However, during the August 12, 2016 EPA and KDHE phone conference EPA stated that only chat exceeding the eco-risk cleanup levels would be removed, and chat with lead and zinc concentrations less than those levels would remain. Based on this conflicting information KDHE does not have a clear understanding concerning the locations and extent of removing contaminated ballast chat. KDHE recommends EPA include a PP map depicting ballast removal location segments comprising the proposed chat quantities to be removed and those where EPA anticipates chat will remain.

EPA Response: Please refer to the language in the Final Draft and Final FS, Draft PP, and Final PP for the Preferred Alternative. The EPA's Preferred Alternative would include removal of railroad ballast visibly identified as chat and the underlying soil and material would be removed until the eco-risk cleanup levels, based on XRF screening, are achieved. Figure 2 in the Final PP, also found in the Final Draft FS, depicts the status of the rail lines within the Cherokee County site. The purple shaded lines would be addressed under the OU 08 Preferred Alternative. Both the orange and green shaded lines will be addressed under another OU or have already been addressed by other means. The active lines, in the blue shading, are also not included in OU 08. Referring to Figure 2, all railroad ballast, visibly identified as chat, would be addressed within the Cherokee County site boundaries. Therefore, there would not be ballast segments left in place.

4. (KDHE Comment) KDHE is concerned that completing the proposed PP remedial action involves leaving sporadic remnants of exposed, contaminated ballast chat resulting from only removing chat exceeding the eco-risk cleanup levels versus removing all ballast visibly identified as chat discussed in the draft FS. This uncovered contaminated chat is likely to invite increased human activity thus affecting potential human health exposure scenarios especially near urban areas and rural residences, and likely resulting in the chat being removed and deposited in other areas including roads, driveways, and other areas and in doing so contaminating new areas and creating new exposure scenarios. Leaving exposed contaminated chat could affect ecological receptor exposure scenarios thereby causing an attractive nuisance.

EPA Response: Please refer to the response to Comment 3 above.

5. (KDHE Comment) KDHE cannot feasibly implement state-equivalent institutional controls (IC) and provide long-term operation and maintenance (O&M) at numerous sporadic remnant areas containing exposed, contaminated chat.

EPA Response: Please refer to the response to Comment 3 above.

6. (KDHE Comment) During EPA's August 15, 2016, OU-8 Public Availability Session in Baxter Springs EPA indicated that regional plans to convert historic rail beds to the national Rails to Trails program largely prompted EPA to begin investigating the rail lines comprising OU-8, and the PP indicates that the potential change in land use affects human health risk and eco-risk exposure scenarios. As KDHE understands the Rails to Trails program and its auxiliary experience with a project near Andover, KS is that project conformance requires any contaminated material encountered to be removed or otherwise encapsulated and restricted with IC.

EPA Response: The EPA began its separate investigation into the historic rail lines following informal notification of regional plans for Rails to Trails on the Jasper County, Missouri site, part of the Tri-State Mining District, with potential expansion into Kansas. Previously, the historic, inactive rail lines were being addressed when encountered at other OUs at mine waste areas. Please also refer to the response to Comment 3 above.

7. (KDHE Comment) As mentioned in its draft FS response KDHE's consideration of remedial alternatives weighs heavily the practicability of placing and maintaining state-equivalent ICs and the state's foreseen long-term O&M responsibility. KDHE anticipates successfully implementing IC agreements on one or a few consolidation areas currently planned in OUs 3 and 4 versus numerous sporadic remnant or miles of linear consolidation areas proposed under PP Alternatives 2 and 4. Fewer consolidation areas also would reduce estimated long-term O&M and related costs.

EPA Response: Please refer to the response to Comment 3 above.

8. (KDHE Comment) KDHE supports PP *Alternative 3* using the PRGs as cleanup levels. Using the PRGs as cleanup levels would eliminate all potential negative effects of leaving sporadic remnants of uncovered, contaminated ballast chat described in comment 4 above and preclude the infeasibility of implementing ICs at numerous sporadic remnant or miles of linear consolidation areas.

EPA Response: Please refer to the response to Comment 3 above.

If you should have questions regarding these responses to comments, please contact me at (913) 551-7939 or by email at hagenmaier.elizabeth@epa.gov.

Sincerely,

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